National Weather Service - Medford, Oregon

Summer 2010

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The Crater Chronicle

From the Desk of the Meteorologist-In-Charge

By John Lovegrove

Inside This Issue:

Severe Weather Reference Card

- Spotter # (if applicable)
- Time of Event
- Location
- Weather Event (Tornado/Funnel Cloud, Hail, Wind Gusts, Heavy Rain, Flooding)

Welcome to the first edition of **The Crater Chronicle**, the new quarterly newsletter from the National Weather Service Forecast Office in Medford. Through this newsletter we can celebrate the contributions of our many volunteers – spotters and cooperative observers – as well as letting you know more about the office and weather in general.

Severe weather spotters are essential to our warning program. Satellites, radar and automated observing equipment are all very important to us but nothing can replace a pair of eyes on the other end of the phone to tell the forecasters what is really happening on the ground. I want to say to all of our spotters – ***THANK YOU!*** Our job would be much, much more difficult without you.

Cooperative observers are critical in the maintenance of the climate observation program in the United States. The observers record their data day in, day out. Some observers have been providing this vital data for many years.

Most readers of this newsletter have probably never visited the Medford NWS office and may not be aware of all that we do. If you are in the Medford area, I invite you to take a few minutes to stop by to meet a few of us and see what we do. We are YOUR National Weather Service. For individuals and families, just stop by and we'll show you around. Groups should call ahead to set up a tour.

The mission of the NWS is to use warnings and forecasts to save lives and property and to enhance the nation's economy. There are 121 other offices similar to Medford in the NWS stretching from San Juan, Puerto Rico to Caribou, Maine to Seattle to San Diego. There are also offices in Alaska, Hawaii and Guam. The Medford office is responsible for seven counties in southwest Oregon (Coos, Curry, Douglas, Josephine, Jackson, Klamath, and Lake) and two counties in northern California (Siskiyou and Modoc). The area that an office is responsible for is based upon the coverage of its corresponding Doppler weather radar. The Medford radar is located on top of Mt. Ashland with the white dome easily visible from the Rogue Valley and parts of Siskiyou County.

I look forward to talking with you in future issues of **The Crater Chronicle** about weather, climate and the NWS. I hope you enjoy reading on and if you would, let us know what you think about it. If you have any specific questions, let us know and we'll address them.

Spotters, We Want to Hear From You! Stay Up-To-Date by E-mail!

The group of volunteer Weather Spotters play an important role in our operations at the Medford office. Your reports and observations provide valuable information to what is occurring at that time or what has occurred recently. It is important for us to maintain accurate contact information for you in case we need to reach you during times of active weather or easily reference your location. If you change addresses or phone numbers, please let us know. You may call us using either the toll-free 1-800 Spotter number you received during your training or the office phone number, **(541) 773-1067**. You may also send an e-mail to: **Ryan.Sandler@noaa.gov**. You may receive a phone call once a year or every other year from a forecaster at our office as we work to verify our records are current.

We are also increasingly using e-mail to send any information or announcements to our Spotters. If you would like to add your e-mail address to our list, please contact us. **Please know that all of the information you provide is never shared with anyone.**

We will soon have several methods for you to send us your weather reports - either by phone or on the web! You may always contact us by phone using the toll-free 1-800 Spotter number; we are here 24 hours a day, 7 days a week. If you have an urgent report, this is the fastest and most efficient way to ensure it is received by a National Weather Service meteorologist. You will also soon be able to submit your weather report at any time by going online and using the National Weather Service's new E-Spotter service. Once we have this service up and running at our office, this will send the report electronically to our office, and we will receive it almost immediately after it is submitted by you. To access this service and find out more information, direct your web browser to the web site: **http://espotter.weather.gov**. In future editions of The Crater Chronicle, we will update you on the status of this service and provide information on how to sign up. We will also send out this information through our Weather Spotter E-mail List as soon as it is available, so if you would be interested in

accessing this service, be sure to provide the office with your e-mail address. Once the service is up and running, there are also instructions on how to sign up on the E-Spotter web page. If you have any questions, please contact us, and we will be happy to assist you in the process.

You may contact us anytime with questions or comments about the Spotter program.

Reporting Weather Impacts - How You Can Make a Difference

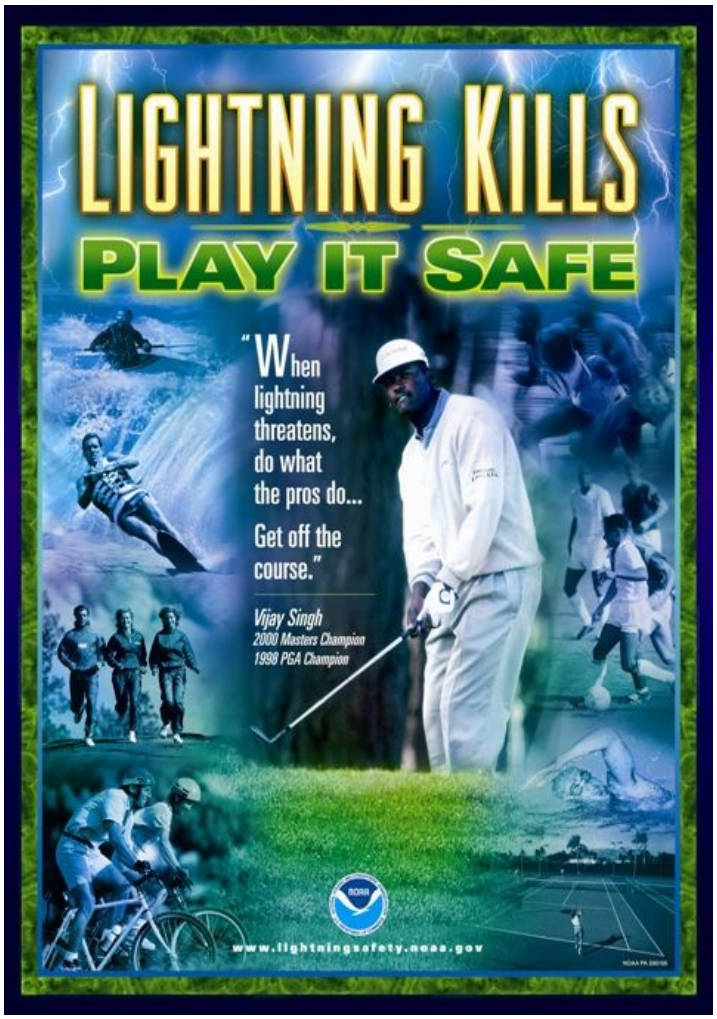
By Connie Clarstrom, Meteorologist

Weather Spotters are our eyes and ears in the field that support the National Weather Service (NWS) mission to provide weather forecasts and information to protect lives and property. The NWS has a renewed focus on understanding what impacts weather is having in the community as well as forecasting and warning for the weather itself. For example, severe weather due to ice, snow, or high winds may cause structural damage, lead to highway closures from large traffic accidents, or cause widespread power outages in a community.

The NWS utilizes information on community impacts in its forecasts, watches and warnings. Information on weather impacts may be used by forecasters in deciding when to issue weather warnings. This information may also be added to warning statements to provide more detailed information to the community. Also, reports of impacts are made available to emergency responders and decision makers in the community. Weather Spotters may help in this process by reporting weather-related damage and any large scale or widespread impacts in the community, such as the flooding shown to the right or thick fog that is slowing traffic on the freeway. Simply call the 1-800 Spotter Number provided in your training as you would for any other weather report, or call the office at 541-773-1067.

Flooding in downtown Rogue River, June 2009.

Play it Safe - When it Roars, Go Indoors!



The summer season is when many people are outdoors enjoying the numerous activities available in southern Oregon and northern California, including boating, hiking, camping, biking, and golfing. The summer season also brings an increased threat of thunderstorms to develop and threaten those who are outdoors. If a thunderstorm developed nearby, do you know what you would do?

The NWS' annual Lightning Safety Week is from June 20-26, 2010. This week is designed to raise awareness about one of the most deadly weather phenomena. Each year, an average of 58 people are killed by lightning nationwide, while hundreds of others are permanently injured.

There is no safe place to be when you are outside and caught in a thunderstorm. At the first sign of thunder, get inside a substantial building or hard-topped metal vehicle as soon as possible. This is the only way to significantly reduce your risk. Avoid open areas; isolated tall trees, towers, or poles; and any metal objects.

Don't be fooled by clear blue skies above you! Lightning strikes as far as 10 miles away from any rainfall both ahead of and behind any thunderstorm. Wait 30 minutes after you hear the last clap of thunder until exiting your safe place.

While the National Weather Service issues severe thunderstorm watches and warnings based on damaging winds or hail, watches and warnings are NOT issued for lightning. Look for darkening skies, increasing wind, or flashes of lightning to alert you that the weather may be changing. A battery-powered NOAA Weather Radio All Hazards will allow you to monitor any short-term forecasts that are issued for developing thunderstorms as well as any watches or warnings. To find out more, go to: **lightningsafety.noaa.gov**.

Become a Fan of the National Weather Service on Facebook

The National Oceanic and Atmospheric Agency and the National Weather Service recently joined the social media website Facebook. This will allow you to follow the latest news and interact with NOAA and the NWS. You do not need to be a member of Facebook to view the pages, but you do need to have an account if you want to become a fan of the agencies to post information on their Walls and receive updates when news is posted. Check out the NOAA Facebook site at: **http://www.facebook.com/usnoaagov**

The NWS' Facebook page can be viewed at this address:

http://www.facebook.com/US.National.Weather.Service.gov

The NWS is also starting an experimental method of submitting Storm Reports by Twitter. Using a #wxreport tag, you can report significant weather from your location, utilizing either the web-based Twitter.com or your mobile phone. A current Twitter account is required to participate in this test. Find out more at: **http://www.srh.noaa.gov/srh/twitter/twitter.php**

Remember, you should also call the local NWS office with your report.

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twitter

Keep Your Eye on the Sky this Summer

The summer season is one of the best times to sky-watch in southern Oregon and northern California - not for weather, but for astronomy! The mostly clear skies in the evenings and at night provide ideal conditions for sightings of astronomical events such as eclipses and meteor showers.

This year, the summer season will start out with a partial lunar eclipse on June 26, 2010. The entire event will be viewable over the Pacific Ocean and eastern Australia, but observers in the western half of the U.S. and Canada will see some of the event before the moon sets. The event is expected to begin in the early morning hours of the 26th and end before dawn.

Beginning July 23, the annual Perseids Meteor Shower gets underway. The best viewing will occur during the night of August 12 and the morning of August 13, with an estimated 60 meteors per hour in the northeastern sky. It is possible to see meteors as late as August 22 during the meteor shower. On August 20, Neptune will make its closest pass to Earth but will still appear as a tiny blue dot in most telescopes. August 24 brings the smallest full moon of the year as it is at its farthest from Earth. Also check the Satellite Flybys Calendar on SpaceWeather.com for when the International Space Station will be passing overhead. This appears to look like a very bright star or planet arcing through the sky as it moves at a fast rate of speed.

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Have a Question? Need an Answer? Ask a Meteorologist!

Have you ever wondered what causes rainbows or why is the sky blue? Have you seen halos around the sun or moon and wanted to know how they appear? And just what is the difference between sleet, hail, graupel, and ice pellets? This is your opportunity to have your question answered! In each issue of the Crater Chronicle, we will be answering a question submitted by our readers. There are a wide variety of questions that could be submitted - anything you think could be answered by a meteorologist! If your question is not answered right away in the next issue of the Crater Chronicle, don't worry! We will save all questions we receive for use in future editions of the newsletter.

The next issue of the Crater Chronicle will be published in September 2010 for the Fall edition. If you have a question, please submit it to our Warning Coordination Meteorologist, Ryan Sandler, at: **Ryan.Sandler@noaa.gov**. Keep checking this space for an answer!

Submit a Question for the Next Issue of the Crater Chronicle's "Ask A Meteorologist" Column!

E-mail: Ryan.Sandler@noaa.gov

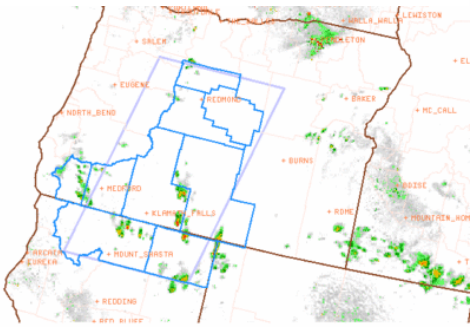
CoCoRaHS: Because Every Drop Counts

Do you measure how much rain fell each day, or would you like to start doing so? Consider joining CoCoRaHS, a volunteer organization of backyard observers that strives to record and map all precipitation. Often times, official weather stations are spread far apart and may not capture any or all of the precipitation that fell from a storm system. We need your help to fill in the gaps! All you need is a 4-inch rain gauge and the ability to input your data onto the CoCoRaHS website. CoCoRaHS has expanded to all 50 states now, allowing users from all types of different fields to view the variability in precipitation across cities, states, or the nation. For more information, you may visit their website **cocorahs.org**, or send an e-mail to our office's CoCoRaHS coordinator, Marc Spilde, at **marc.spilde@noaa.gov**.

Watches? Warnings? What's the Difference?

Although not as common as in other parts of the country, severe thunderstorms do occur over the Pacific Northwest and Northern California. The summer season is frequently when severe thunderstorms flare up. However, severe thunderstorms can occur during other times of the year. Do you know what it means when a Severe Thunderstorm Watch is issued? What about a Severe Thunderstorm Warning? How can these help you stay safe?

A Severe Thunderstorm Watch is issued by the National Weather Service's Storm Prediction Center (SPC) based in Norman, Oklahoma. SPC meteorologists issue forecasts and watches related to severe thunderstorms and tornadoes across the nation, while also monitoring for heavy rain, heavy snow, and fire weather concerns. A Severe Thunderstorm Watch highlights an area where an organized episode of hail one inch in diameter or larger and/or damaging thunderstorm winds are possible during a three- to eight-hour period. Watches can cover a large area, as evident by the picture to the right. Watches are not issued for all severe thunderstorms, as many storms affect a small area for a short period of time; watches are intended for areas where well-organized or significant severe weather is possible or where the threat of severe weather will last for a long period of time.



An example of a severe thunderstorm watch issued August 2, 2009 by the NWS' Storm Prediction Center.

Severe Thunderstorm Warnings are issued by your local National Weather Service office, which is Medford, Oregon, in this case. A warning means severe weather is expected to occur within a very short period of time in your area (generally within an hour) or has already been observed. A severe thunderstorm is defined as having either one-inch diameter hail or larger and/or thunderstorm winds exceeding 58 mph. **A severe thunderstorm warning serves as a notice that you should seek shelter immediately.** Warnings are storm-based, meaning they cover a much smaller area compared to watches and are more specific to a particular storm or storms, often encompassing the area a storm serves as an immediate threat to or its expected track. Remember, lightning and heavy rain are not criteria for a severe thunderstorm warning to be issued. For more severe weather information, visit the SPC website at: **http://www.spc.noaa.gov**.

A Different Kind of Severe Weather

By Ryan Sandler, Warning Coordination Meteorologist

For most of the United States, this is the heart of severe weather season, bringing tornadoes, flash floods, hail, and high winds. However, for Southern Oregon and Northern California, the warm season brings a different kind of severe weather. This "severe weather" that impacts our region between late June and early October is wildfire.

Wildfires in the Pacific Northwest are often started by thunderstorm outbreaks consisting of hundreds or even thousands of lightning strikes. These strikes overwhelm the ability of firefighters to reach all of the fire starts. A small fire can grow rapidly due to dry vegetation and high winds. National Weather Service meteorologists assist firefighters by producing fire weather forecasts. Meteorologists also issue fire weather watches and red flag warnings when the combination of dry vegetation and critical weather conditions, such as high winds or frequent lightning, create a high fire danger.

We have three meteorologists at our office that have special training and can be assigned to large fires anywhere in the United States. They are called Incident Meteorologists (IMETS) and can spend up to two weeks at a fire camp. IMETs can deploy rapidly with portable forecast and communications equipment, providing important fire weather forecasting support. The forecaster sets up a laptop computer and communications equipment near the fire lines. From there they provide critical information that helps fire managers decide where to move fire crews, learn about incoming weather, plan tactics, and provide for firefighter and public safety.

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You will likely never see a tornado, but you will definitely see wildfires or be impacted by their smoke.

NWS Medford Celebrates Earth Day!

Staff members from the National Weather Service office in Medford made the short trip down I-5 to participate in the annual Rogue Valley Earth Day celebration at ScienceWorks in Ashland, OR, on Saturday, April 24.

The NWS has participated in this Earth Day celebration for the past several years now. The NWS booth provided plenty of weather and water information under this year's theme, "Living, Learning, Leading." Warning Coordination Meteorologist Ryan Sandler, Hydrologist Spencer Higginson, and Lead Forecaster Frederic Bunnag also answered questions from visitors and explained how the various weather instruments on display were utilized. Visitors could take home free cloud charts as well as pamphlets on weather safety and weather preparedness.

Kids who came to the Earth Day celebration took part in an Eco-Quest Adventure where they visited various booths, participated in an activity to learn about sustainability, and earned prizes. The EcoQuest activity at the NWS booth allowed kids to power a wind anemometer using their breath; their highest speed was recorded on a large display board for all visitors to the booth to view.

A contest developed throughout the day as visitors attempted to beat the highest speed posted. The highest speed recorded was 45 mph! To compare, wind speeds in a tropical storm can range from 39-73 mph.

Above - A participant attempts to create wind and spin the anemometer using her breath. Below - A wide variety of booths and beautiful weather brought plenty of visitors to Ashland, Oregon, for the annual Earth Day festival.

Above - Visitors to the Earth Day celebration visit the National Weather Service booth. Below - Hydrologist Spencer Higginson and Warning Coordination Meteorologist Ryan Sandler display a few of the booth's activities.

National Weather Service - Medford, Oregon

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Visit Our Website!

http://www.weather.gov/mfr

Our Vision

Professionals focusing on science, teamwork, and customer service to design and deliver the best decision-support information to our community.

Our Mission

Our team at the National Weather Service Office in Medford strives to deliver the best observational, forecast and warning information through exceptional customer service, extensive training and education, maintaining quality electronic systems, and relying upon an outstanding team of weather spotters and cooperative observers. We do this within the overall mission of the NWS:

To provide weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community.

Our Values

Trust, Integrity, Professionalism, Service, Teamwork, Ingenuity, Expertise, and Enthusiasm.

About Us

The Weather Forecast Office in Medford, Oregon, is one of more than 120 field offices of the National Weather Service, an agency under the National Oceanic and Atmospheric Administration and the United States Department of Commerce. The Weather Forecast Office in Medford serves 7 counties in southwestern Oregon and 2 counties in northern California, providing weather and water information to more than a half-million citizens. We are also responsible for the coastal waters of the Pacific Ocean from Florence, Oregon, to Point St. George, California, extending 60 miles offshore. The office is staffed 24 hours a day, 7 days a week, and 365 days a year by a team of 26 meteorologists, hydrologists, electronic technicians, hydro-meteorological technicians, and administrative assistants, under the direction of Meteorologist-In-Charge John Lovegrove.